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ABSTRACT

This absentee program project funded under Title I of the Elementary and Secondary Education Act of 1965 was evaluated for the New York City Board of Education. Four Brooklyn high schools participated in the program. Selected students were two grades or more retarded in reading and mathematics as indicated by their standardized test scores. They also had been absent from school for 30-50 days during the previous four to five months. The absentee program provided reading and mathematics in individualized and group instructional settings and supportive and follow-up services for 230 ninth grade students who were not benefiting from instruction at their home schools. The program consisted of two six-week cycles followed by the students' re-entry into the mainstream of their home schools. The absentee program was implemented at the Community Satellite Center located near the students' neighborhoods. Correlated T tests were used to evaluate the extent of students' reading and mathematics improvement and program attendance. In addition, the extent to which the implemented program corresponded with the proposal guidelines was evaluated. All students received instruction in reading and mathematics; and preprogram attendance was compared to program attendance. The results indicated growth in both reading and mathematics. Preprogram and program attendance rates were statistically significant. The program was implemented exactly as described. (Author/JP)

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EVALUATION REPORT

Function No. 09-59692

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Reading and Mathematics for Chronic Absentee High School Entrants

Spring, 1975

Warren L. Balinsky

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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An evaluation of a New York City School district educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1974-75 school year.

Dr. Anthony J. Polemeni, Director

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READING AND MATHEMATICS FOR CHRONIC ABSENTEE

HIGH SCHOOL ENTRANTS. B/E #09-59692

ERRATUM

With respect to the data contained on Data Loss Form-Item 6-Page 15, a more complete and accurate breakdown of the reasons why high school students were not post-tested would be as follows:

a) Approximately 25% of those who did not take the post test were discharged or suspended from school.

b) Another 10% of those who dropped out of the program were not post-tested.

c) Another 65% of the pupils who were not post-tested were those pupils who did not report on the test date scheduled.

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I. The Program

The Reading and Mathematics Program for Chronic Absentee High School Entrants (herein referred to as the Absentee Program) serves four high schools, Boys' High School, Bushwick High School, Eastern District High School and Franklin K. Lane High School. The Absentee Program provides reading and mathematics individualized and group instruction as well as outreach, supportive and follow-up services for high school entrants (9th graders) who are severely retarded two or more years in reading and mathematics, and who are not benefiting from instruction in these subjects at their home school. This critical situation has arisen because of the pupils' withdrawal from the educational mainstream as evidenced by their pattern of chronic school absenteeism, 30-50 days of absences the previous 4 or 5 months prior to entry into the program.

The program functions out of a community satellite center located in Brooklyn, New York near the various neighborhoods of its target population and at the home schools. The operation of the program is by cycles. A cycle consists of six weeks of instruction and service at the community satellite center followed by re-entry back into the mainstream at the students respective home school.

The 230 students in the program were chosen based on the following: two grades or more retarded in reading and/or mathematics as indicated by the pupils' standardized test scores found in their school records and/or 30-50 days of absence the previous 4-5 months prior to entry in the program. The program attempted to improve the reading and mathematics levels of the target population, and to increase the attendance of its participants.

The program funded a staff consisting of 8 basic education teachers, 4 attendance teachers, 5 educational assistants, 4 family workers and 2 secretaries and operated from February 20, 1975 to June 13, 1975 in two 6 week cycles.

II. Evaluative Procedures

The evaluative design prepared by the Office of Educational Evaluation specified that the following three objectives were to be assessed:

Evaluation Objective #1. To determine whether, as a result of participation in the Bureau of Attendance Program, reading and math grades of students, will show a statistically significant difference between the real post-test score and the anticipated post-test score.

Subjects: All participants in the program.

Method and Procedures: The appropriate level of the Stanford Diagnostic Test will be administered on a pre/post test basis.

Analysis of Data: Data will be analyzed by the "Real (treatment) Post-Test vs. Anticipated (without treatment) Post-Test" design.

Time Schedule: Pre tests will be administered shortly after the beginning of the program, and post-test shortly before the termination of the program.

Evaluation Objective #2. To determine the extent to which attendance of participants has improved.

Subjects: All participants.

Procedures: A comparison of the Fall semester attendance of the participants will be made with their Spring semester attendance. The number of attendance days up to January 1, 1975 will be determined. An equal number of attendance days will be determined from January 1, 1975 onward. Approximately the latter part of May, 1975 will be the cut off day for evaluation purposes.

Data Analysis: Improvement in attendance will be determined by a correlated t test between pre-program attendance (Fall semester) and program attendance (Spring semester) for the participants.

Evaluation Objective #3. To determine the extent to which the program, as actually carried out, coincided with the program as described in the Project Proposal.

In its evaluation report, the agency of evaluation must make a statement concerning the extent of this implementation and, where serious discrepancies exist between proposal and program, provide a description of discrepancies.

All of the above evaluative procedures were administered as planned. All testing periods i.e., pre-testing administered shortly after the beginning of each cycle, and post-testing administered shortly before the termination of the program were implemented on time. The total number of students in the program was 230. However, when one considers late entrants into the program, absentees and students who transfer out of the program during the year, it becomes clear why 47-79% of the total population is the number of pupils with both pre and post-test scores for analysis.

III. Findings

This section shall present each objective of the evaluation followed by a table and explanation of the findings relative to that evaluative objective.

Objective 1. - Improvement in Reading and Mathematics

All students in the project received instruction in reading and mathematics. Did these students demonstrate a statistically significant improvement in these subjects as measured by the appropriate Stanford Diagnostic Test and analyzed on a real post vs. anticipated post-test basis by a correlated t test? Tables 1, 2, 3 and 4 report that these students did demonstrate a statistically significant growth in reading and mathematics for each cycle.

Table 1: Stanford Diagnostic Reading Test - Cycle I

	Predicted Post Test	Actual Post Test
No. of Pupils	57	57
Mean (Grade Eq.)	4.29	4.68
Standard Deviation	2.02	1.99
Obtained value of t	1.14	
Results	Signficant at the .20 level.	

Table 2: Stanford Diagnostic Mathematics Test - Cycle I.

	Predicted Post Test	Actual Post Test
No. of Pupils	53	53
Mean (Grade Eq.)	4.25	4.93
Standard Deviation	1.24	1.32
Obtained value of t	3.09	
Results	Significant at the .01 level.	

Table 3: Stanford Diagnostic Reading Test - Cycle II.

	Predicted Post Test	Actual Post Test
No. of Pupils	64	64
Mean (Grade Eq.)	3.76	4.18
Standard Deviation	2.06	1.04
Obtained value of t	1.50	
Results	Significant at the .10 level.	

Table 4: Stanford Diagnostic Mathematics Test - Cycle II.

	Predicted Post Test	Actual Post Test
No. of Pupils	57	57
Mean (Grade Eq.)	4.25	4.68
Standard Deviation	1.04	1.28
Obtained value of t	2.15	
Results	Significant at the .05 level.	

The Stanford Diagnostic Reading Test covers the topics of: reading comprehension, vocabulary, auditory discrimination, syllabication, beginning and ending sounds, blending and sound discrimination. Level 1, form W was used for the pre-test and level 1, form X was used for the post-test. Tables 1 and 3 are for reading in cycles one and two respectively. Statistically significant growth in reading during cycle one is only at the .20 significance level, while the significance level in cycle two is slightly higher at .10.

The Stanford Diagnostic Mathematics Test covers the topics: concepts, computation and number facts. Level 1, form W was used for the pre-test and level 1, form X was used for the post-test. Tables 2 and 4 are for mathematics in cycles one and two respectively they both show strong statistically significant growth in mathematic The significance levels are .01 and .05 for cycles one and two respectively, these are excellent.

In summary, the significance levels for mathematics were higher than those for reading.

In summary, growth in both reading and mathematics was statistically significant. The significance levels for mathematics were better than those for reading.

Objective 2. - Improvement in Attendance

Pre-program attendance was compared to program attendance for statistically significant improvement and analyzed by a correlated t test. Tables 5 and 6 present the results of the comparisons.

Table 5: Attendance - Cycle I

	Pre-Test	Post-Test
No. of Pupils	91	91
Mean (%)	48.61	59.50
Standard Deviation	27.08	22.44
Obtained value of t	2.94	
Results	Significant at the .01 level.	

Table 6: Attendance - Cycle II.

	Pre-Test	Post-Test
No. of Pupils	89	89
Mean (%)	37.47	68.76
Standard Deviation	24.34	24.16
Obtained value of t	8.57	
Results	Significant at .001 level.	

The preprogram and program attendance rates by percentage, for cycle one were 48.61% and 59.50% respectively. This difference was statistically significant at the .01 level ($t = 2.94$). The preprogram and program attendance rates by percentage, for cycle two were 37.47% and 68.76% respectively. This difference was statistically significant at the high level, .001 level ($t = 8.57$). Therefore, the objective of statistically significant improvement in attendance was attained.

Objective 3. - Discrepancy Analysis - Program vs. Proposal

To what extent was the program implemented as described in the program proposal? The program was implemented exactly as described in the program proposal in all ways except one. As originally planned the Absentee Program was to operate three 6 week cycles delivery services to 345 students. This would have happened had the funding been authorized on January 1, 1975 as planned. However, final funding for this program was not authorized until February 19, 1975. This late funding placed a severe time limitation on the program and consequently permitted time for only two 6 week cycles instead of three. This late start required a Herculean effort on the part of the program leadership with respect to hiring staff,

obtaining materials, recruiting students, reserving facilities, etc. Ms. Marguerite Johnson deserves special recognition for her outstanding performance.

The lateness of the start of the program had an impact on materials, much of which arrived late in the first cycle. Most books and instructional materials did meet the needs of the target population. The satellite facilities were slightly overcrowded, but this was not necessarily detrimental, for the close quarters helped to impose good discipline. However, the facilities in the regular high schools were poor in all cases. Two particularly bad sites were the Eastern District High School Annex and the Bushwick High School Annex. Both these schools are terribly overcrowded, the teaching facilities used by this program in the Eastern District Annex consisted of a corner of the gymnasium. The teaching facilities used in the Bushwick Annex consisted of the rear of a classroom, in this classroom two entirely different groups of students were being taught different materials.

This program is servicing the needs of the specific target population for which it was designed. It is also having an impact on other district programs, such as the Venture Program in Franklin Lane High School.

IV. Summary of Major Findings, Conclusions and Recommendations

All students in the project demonstrated statistically significant growth as determined by a correlated t test in:

1. Mathematics
   a. Cycle one at the .01 significance level.
   b. Cycle two at the .05 significance level.
2. Attendence
   a. Cycle one at the .01 significance level.
   b. Cycle two at the .001 significance level.

The program was fully implemented as planned, except for the loss of an educational cycle--a limitation imposed on the program by its late funding. Therefore, one must conclude that the program was highly successful in achieving its objectives relative to mathematics and attendance.

In relationship to redesigning the program for future years operation, the evaluator recommends:

1. Earlier and greater involvement of the participating high schools. At least one full day of in-depth discussion with each high school principal and/or staff followed by at least one day with all the participating school principals and/or staff should take place prior to the program's implementation. Grading and facilities must be discussed at these meetings!
2. Greater transition assistance for students returning from the program to their regular high school. The kind of

follow-up provided by Mr. Parson, the attendance teacher from Boys' High School, should be emphasized and expanded. Counseling must convey to the students a rationale for why they should come to school.

3. A preparatory period for teachers and assistants, emphasizing the topics of:

a. Counseling for chronic absentee students,

b. Teaching in irregular facilities,

c. Special reading and mathematics techniques,

d. Special discipline problems.

This project should definitely be continued since the districts it serves are in great need of its services. Furthermore, this program should be funded throughout the entire year, having many cycles, and expanded into other districts.

V. Exemplary Program Abstract: B/E #09-59692

Component Code	Activity Code	Objective Code
6 0 9 1 5	7 2 0	8 0 1

Component Abstract

Mathematics achievement was measured on the Stanford Diagnostic Mathematics test using a predicted/actual post-test difference and analyzed by a correlated t test. The significance levels were .01 for 53 students in cycle one and .05 for 57 students in cycle two. Cycle one students grew over 8 months over a three month period and cycle two students grew over 5 months in a six week period. This unexpected accomplishment is accounted for by the small group instruction coupled with the high dedication and abilities of the mathematics teachers. This growth is exemplary in that it is statistically significant at .05 and .01 levels.

Component Code	Activity Code	Objective Code
6 5 1 1 5	7 0 4	8 1 1

Component Abstract

Pre-program attendance was compared to program attendance for statistically significant improvement and analyzed by a correlated t test. The significance levels were .01 for 91 students in cycle one and .001 for 89 students in cycle two. Cycle one students attendance improved by 10.89% over a three month period and cycle two attendance improved by 31.29% over a six week period. This unexpected accomplishment is accounted for by personal counseling services which has improved the students attitude toward school. The regular teachers as well as the attendance teachers deserve credit for this achievement. This achievement is exemplary in that it is statistically significant at better than the .05 level.

Appendix

Use Table 30A. for Historical Regression Design (6-Step Formula) for Reading (English); Math (English); Reading (Non-English); Math (Non-English).

30A. Standardized Test Results.

In the Table below, enter the requested information about the tests used to evaluate the effectiveness of major project components/activities in achieving desired objectives. This form requires means obtained from scores in the form of grade equivalent units as processed by the 6 step formula (see District Evaluator's Handbook of Selected Evaluation Procedures, p. 45-49). Before completing this table, read all footnotes. Attach additional sheets if necessary.

Component Code	Activity Code	Test Used[1]	Form		Level		Total N[2]	Group I.D.[3]	Number Tested[4]	Pretest		Predicted Posttest Mean	Actual Posttest		Statistical Data	
			Pre	Post	Pre	Post				Date	Mean		Date	Mean	Obtained Value of t	Level[5] of significance
60815	720	SDRT 66	W	X	1	1	115	9	57	3/13	4.15	4.29	6/11	4.68	1.14	p≤.20
60915	720	SDAT 66	W	X	1	1	115	9	53	3/13	4.11	4.25	6/11	4.93	3.09	p≤.01
60815	720	SDRT 66	W	X	1	1	115	9	64	5/7	3.64	3.76	6/11	4.18	1.50	p≤.10
60915	720	SDAT 66	W	X	1	1	115	9	57	5/7	4.11	4.25	6/11	4.68	2.15	p≤.05

1/ Identify the test used and year of publication (MAT-58, CAT-70, etc.).
2/ Total number of participants in the activity.
3/ Identify the participants by specific grade level (e.g., grade 3, grade 5). Where several grades are combined, enter the last two digits of the component code.
4/ Total number of participants included in the pre and posttest calculations.
5/ Specify level of statistical significance obtained (e.g., $p \leq .05$; $p \leq .01$).

Measures of growth other than Standardized Tests

30D. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 30A, B or C, use any combination of items and report on separate pages. Attach additional pages if necessary.

Component Code	Activity Code	Objective Code	
6 5 1 1 5	7 0 4	8 1 1	5

Brief Description To determine the extent to which attendance of participants has improved.

Number of cases observed: 180 Number of cases in treatment: 230

Pretreatment index of behavior (Specify scale used): Preprogram attendance of the students. Number of days of attendance prior to start of the program.

Criterion of success: Statistically significant improvement in attendance determined by a correlated t test.

Was objective fully met? Yes [X] No [ ] If yes, by what criteria do you know? Cycle 1 - preprogram/program attendance for 91 students showed statistically significant results at the .01 level using a correlated t test. Cycle II - analysis for 89 students resulted in statistically significant results at the .001 level using a correlated t test.

Comments: These are outstanding achievements, however, the real measure of success will be found only by tracking these students into the future.

(attach to MIR, item #30) Function # 09-99092

Reading and Mathematics for Chronic Absentee High School Entrants

In this table enter all data loss information. Between MIR, item #30 and this form, all participants in each activity must be accounted for. The component and activity codes used in completion of item #30 should be used here so that the two tables match. See definitions below table for further instructions.

Component Code	Activity Code	(1) Group I.D.	(2) Test Used	(3) Total N	(4) Number Tested/ Analyzed	(5) Participants Not Tested/ Analyzed		(6) Reasons why students were not tested, or if tested, were not analyzed	
						N	%		Number/ Reason
60815	720	9	SDRT 66	115	57	58	50%	Students not tested because	58
								they left this program before	
60915	720	9	SDAT 66	115	53	62	53%	posttesting.	62
60815	720	9	SDRT 66	115	64	51	44%	"	51
60915	720	9	SDAT 66	115	57	58	50%	"	58

(1) Identify the participants by specific grade level (e.g., grade 3, grade 9). Where several grades are combined, enter the last two digits of the component code.
(2) Identify the test used and year of publication (MAT-70, SDAT-74, etc.).
(3) Number of participants in the activity.
(4) Number of participants included in the pre and posttest calculations found on item #30.
(5) Number and percent of participants not tested and/or not analyzed on item #30.
(6) Specify all reasons why students were not tested and/or analyzed. For each reason specified, provide a separate number count. If any further documentation is available, please attach to this form. If further space is needed to specify and explain data loss, attach additional pages to this form.